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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/815,175 | 03/26/2004 | Kenichi Furukawa | 5854-32 | 7084 |

20575 7590 10/16/2007
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| EXAMINER |
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GUPTA, PARUL H

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| ART UNIT | PAPER NUMBER |
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2627

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| MAIL DATE | DELIVERY MODE |
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10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/815,175 | | FURUKAWA ET AL. | |
| | Examiner | | Art Unit | |
| | Parul Gupta | | 2627 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-7 are pending for examination as interpreted by the examiner. The amendment and arguments filed on 3/19/07 were considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 6/1, 6/2, 6/3, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Abe, US Patent 5,627,807.

Regarding claims 1-3 and 7, Abe discloses a method for adjusting a focus bias in an optical disc drive (abstract), comprising the steps of: rotationally driving an optical disc in a state that only focus servo is engaged without engaging tracking servo (column 5, lines 13-14); driving an actuator of an optical pick-up so that a laser beam projected from the optical pick-up is moved in a tracking direction, thereby intentionally creating a pseudo state resembling a state in which the tracking servo is being actually engaged so as to obtain an HF signal in such state (column 5, lines 13-28 explain how calculations are made regarding the possibility of tracking, even though the tracking servo is not engaged); adding a focus bias to the thus obtained HF signal ("traverse level" as given in column 6, lines 41-50) to vary a focus bias value so that the amplitude of the HF signal is increased or decreased (inherent in the reference, adding a bias will change a signal's amplitude); and determining an optimum focus bias (column 6, lines

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41-50) at which the largest amplitude of the HF signal is obtained (column 6, line 44), wherein the driving of the actuator is carried out by supplying an actuator drive control signal to a tracking actuator of the optical pick-up (column 3, lines 43-46) in a state that tracking servo is not engaged (still done in column 5, lines 13-14), and wherein the actuator drive control signal includes a signal which applies a drive voltage in the form of a pulse wave or a sinusoidal wave to the tracking actuator (definition of "signal" as given in column 3, lines 43-46).

Regarding claims 6/1, 6/2, and 6/3, Abe discloses an optical disc drive equipped with a circuit by which the method described in any one of claims 1 to 3 can be implemented (column 2, lines 50-52).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4, 5, 6/4, and 6/5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe in view of Park, US Patent 6,049,513.

Abe teaches the method of claim 1 but fails to teach the further limitations of claims 4 and 5.

Regarding claim 4, Park teaches the method for adjusting a focus bias in an optical disc drive as claimed in claim 1, wherein the focus bias value is determined based on a signal obtained by passing the HF signal into a peak/bottom holding circuit

(column 5, lines 20-51). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of determining the focus bias as taught by Park into the system of Abe. The motivation would be to compare the HF signal accurately (column 5, lines 31-33 and 46-49 of Park) and to ensure that proper calibration is performed regardless of variation (column 2, lines 51-53 of Park).

Regarding claim 5, Park teaches the method for adjusting a focus bias in an optical disc drive as claimed in claim 1, wherein the adjustment of the focus bias is carried out every time upon an optical disc is loaded into the optical disc drive ("characteristic variation" of column 2, lines 53-58). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of adjusting the focus bias every time upon an optical disc is loaded as taught by Park into the system of Abe. The motivation would be to optimally adjust the focus bias in response to the characteristics of the focus servo section, even when it varies as it does every time the disc is loaded (column 4, lines 20-30).

Regarding claims 6/4 and 6/5, Abe discloses an optical disc drive equipped with a circuit by which the method described in claims 4 or 5 can be implemented (column 2, lines 50-52).

Response to Arguments

4. Applicant's arguments with respect to all claims have been considered but are not persuasive. Applicant contends that The RF signal used in Abe is not the same as the HF signal used in the present invention, thus making it harder to obtain an optimum focus bias. However, despite the signals used and the ease of obtaining the bias, both

obtain the optimum focus bias using similar signals. The ease of obtaining certain values does not make the invention patentably distinct over Abe.

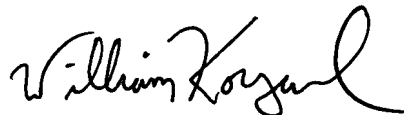
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parul Gupta whose telephone number is 571-272-5260. The examiner can normally be reached on Monday through Thursday, from 9:30 AM to 7 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PHG
9/26/07


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